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**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In Re Application of:**  
Yang, et al. ✓

**Confirmation No.:** 1853

**Serial No.:** 09/921,589

**Group Art Unit:** 1752

**Filing Date:** August 3, 2001

**Examiner:** C. Hamilton

**For:** Laser Imaged Printing Plates

**Express Mail Label No.** EV 160091647 US

**Date of Deposit:** October 24, 2002

**EV160091647US**

Box ☐ NON-FEE

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Assistant Commissioner for Patents  
Washington DC 20231

Sir:

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OCT 28 2002

TC 1700

**REPLY TRANSMITTAL LETTER**

Transmitted herewith for filing in the above-identified patent application is:

- ☐ A Preliminary Amendment.
- ☒ An Amendment Responsive to the Office Action Dated July 30, 2002.
- ☐ An Amendment Supplemental to the Paper filed \_\_\_\_\_.
- ☐ Other: \_\_\_\_\_.

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- ☐ Applicant(s) has previously claimed small entity status under 37 CFR §1.27.
- ☐ Applicant(s) by its/their undersigned attorney, claims small entity status under 37 CFR §1.27 as:
- ☐ an Independent Inventor
  - ☐ a Small Business Concern
  - ☐ a Nonprofit Organization
- ☐ This application is no longer entitled to small entity status. It is requested that this be noted in the files of the U.S. Patent and Trademark Office.
- ☐ Loss of Entitlement Enclosed
- ☐ Substitute Pages \_\_\_\_\_ of the Specification are enclosed.
- ☐ An Abstract is enclosed.
- ☐ \_\_\_\_\_ Sheets of Proposed Corrected Drawings are enclosed.
- ☐ A Certified Copy of each of the following applications: \_\_\_\_\_  
\_\_\_\_\_ is enclosed.
- ☐ An Associate Power of Attorney is enclosed.
- ☐ Information Disclosure Statement.
- ☐ Attached Form 1449.
  - ☐ A copy of each reference as listed on the attached Form PTO-1449 is enclosed herewith.
- ☒ Appended Material as follows: Exhibit A, "Laser Imaged Printing Plate"; Exhibit B, "Pending Claims as of May 13, 2002"; PTO form 1449 listing references FO through GH; Copy of reference GH, 11 pages .
- ☒ Other Material as follows: Declaration of Edward T. Murphy .

## FEE CALCULATION



No Additional Fee is Due.

				SMALL ENTITY		NOT SMALL ENTITY	
	REMAINING AFTER AMENDMENT	HIGHEST PAID FOR	EXTRA	RATE	FEE	RATE	FEE
TOTAL CLAIMS	20	20 (20 MINIMUM)	0	\$9 EACH	\$	\$18 EACH	\$0
INDEP. CLAIMS	3	3 (3 MINIMUM)	0	\$42 EACH	\$	\$84 EACH	\$0
FIRST PRESENTATION OF MULTIPLE DEPENDENT				\$140	\$	\$280	\$0
<input type="checkbox"/> ONE MONTH EXTENSION OF TIME				\$55	\$	\$110	\$0
<input type="checkbox"/> TWO MONTH EXTENSION OF TIME				\$200	\$	\$400	\$0
<input type="checkbox"/> THREE MONTH EXTENSION OF TIME				\$460	\$	\$920	\$0
<input type="checkbox"/> FOUR MONTH EXTENSION OF TIME				\$720	\$	\$1440	\$0
<input type="checkbox"/> FIVE MONTH EXTENSION OF TIME				\$980	\$	\$1960	\$0
<input type="checkbox"/> LESS ANY EXTENSION FEE ALREADY PAID				minus	(\$ )	minus	(\$0 )
<input type="checkbox"/> TERMINAL DISCLAIMER				\$55	\$	\$110	\$0
<input type="checkbox"/> OTHER FEE OR SURCHARGE AS FOLLOWS:							\$0
TOTAL FEE DUE							\$0



A check is enclosed in the foregoing amount due.



Petition is hereby made under 37 C.F.R. 1.136(a) (fees: 37 C.F.R. § 1.17(a)(1)-(4) to extend the time for response to the Office Action of @@ to and through @@ comprising an extension of the shortened statutory period of @@ month(s).



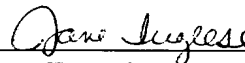
The Commissioner is hereby requested to grant an extension of time for the appropriate length of time, should one be necessary, in connection with this filing or any future filing submitted to the U.S. Patent and Trademark Office in the above-identified application during the pendency of this application. The Commissioner is further authorized to charge any fees related to any such extension of time to Deposit

Account 23-3050. This sheet is provided in duplicate.

- ☒ The Commissioner is authorized to charge payment of the following fees and to refund any overpayment associated with this communication or during the pendency of this application to Deposit Account 23-3050. This sheet is provided in duplicate.
- ☐ The foregoing amount due for filing this paper.
- ☒ Any additional filing fees required, including fees for the presentation of extra claims under 37 C.F.R. 1.16.
- ☒ Any additional patent application processing fees under 37 C.F.R. 1.17 or 1.20(d).

**SHOULD ANY DEFICIENCIES APPEAR** with respect to this application, including deficiencies in payment of fees, missing parts of the application or otherwise, the U.S. Patent and Trademark Office is respectfully requested to promptly notify the undersigned.

Date: October 24, 2002

  
\_\_\_\_\_  
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DOCKET NO.: POLY-1194

PATENT  
RESPONSE UNDER 37 C.R.F. § 1.116  
EXPEDITED PROCEDURE  
GROUP ART UNIT 1752

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Michael Wen-Chein Yang, *et al.*

Serial No.: 09/921,589

Group Art Unit: 1752

Filing Date: August 3, 2001

Examiner: Cynthia Hamilton

For: LASER IMAGED PRINTING PLATES

EXPRESS MAIL LABEL NO.: EV 160091647 US  
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REQUEST FOR RECONSIDERATION

Claims 10 to 14, 17 and 18 are pending in the present application. No claims have been amended, canceled, or added, herein.

Applicants respectfully request reconsideration of the rejections of record in view of the following remarks.

**I. The Specification Describes the Claimed Subject Matter**

Claims 10 to 14, 17, and 18 have been rejected under 35 U.S.C. § 112, first paragraph, because the specification allegedly does not convey to one skilled in the art that Applicants had possession of the claimed subject matter as of their June, 1993 priority date. In particular, the Office Action alleges that those skilled in the art would not understand the specification to describe an ablation layer that is both ablatable by infrared radiation and opaque to non-infrared actinic radiation. Applicants traverse the rejection because it is unsupported by any evidence as to how those skilled in the art would interpret Applicants' 1993 priority document and, in fact, is directly refuted by the evidence of record.

The attached declaration of Edward T. Murphy demonstrates that those skilled in the art, upon review of Applicants' 1993 priority document (and, in turn, similar disclosure in the instant specification) recognize that Applicants were in possession of the subject matter of claims 10 to 14, 17 and 18 and, in particular, ablation layers that are ablatable by infrared radiation (Murphy Decl. ¶ 12). Those skilled in the art understand these documents to describe photosensitive elements that contain a layer that is ablatable by laser radiation, without any requirement that a particular wavelength of laser radiation, or range of wavelengths, be used (Murphy Decl. ¶ 11). The specification teaches that the wavelength of the laser used for ablation should be one that permits ablation without excessive damage to the photopolymer layer (Murphy Decl. ¶ 11). The specification, for example, repeatedly refers to ablation of the ablatable layer at a "selected wavelength" or at the "appropriate

wavelength” (Murphy Decl. ¶ 11).

Although the specification does not require that ablation occur at any particular wavelength, the specification does teach that the use of IR lasers is preferred (Murphy Decl. ¶ 12). For example, Example 3 describes ablation of the ablation layer of a photosensitive element by a laser operating at a wavelength in the infrared region, *i.e.*, 10.6  $\mu\text{m}$ , and describes tests conducted using a laser at other infrared wavelengths, *i.e.*, 1.06  $\mu\text{m}$  (Murphy Decl. ¶ 12). Upon review of this and other disclosure in the instant specification, those skilled in the art recognize that Applicants’ inventions involve the use of ablation layers that are ablatable by infrared radiation (*id.*).

This recognition would not have been altered by the teaching of Applicants’ Example 3 relating to the use of YAG lasers. Although the Office Action correctly notes that the YAG laser in Example 3 was not effective in causing ablation under the particular operating conditions employed, this fact falls far short of establishing that Applicants were not in possession of the claimed inventions. Indeed, those skilled in the art would have readily understood that the absence of ablation resulted from operating the laser at the relatively low power level that was being tested in Example 3, and that this could easily be remedied by operating the laser at a higher power level (Murphy Decl. ¶ 12). Table II, for example, demonstrates that a CO<sub>2</sub> laser emitting in the infrared region was effective in causing ablation at some intensity levels, but was ineffective in causing ablation of the layers when operating at others (*id.*). Those skilled in the art, therefore, would have understood that

a YAG laser (also emitting in the infrared region) would be effective in causing ablation of the ablation layer if simply operated at, for example, a greater intensity level (*id.*).

Accordingly, the mere fact that one of Applicants' experiments seeking to identify representative operating parameters did not provide optimal results does not support the conclusion that "polyamide slip containing Uvinul D 50 are [*sic*] not ablatable with a YAG laser..." (Office Action dated July 30, 2002, page 5).

The experiments described in Example 3 also do not support the conclusion that "the unpredictability of the chemical art of ablatable layers is demonstrated to the worker of ordinary skill in the art by applicants' disclosure." (Office Action dated July 30, 2002, page 7). The fact that lasers emitting infrared radiation are effective in causing ablation when operated at some intensity levels but are less effective when operated at others does not demonstrate that the art is unpredictable. Such results merely demonstrate that IR lasers are more or less effective in causing ablation depending upon the intensity level at which they are operated (Murphy Decl ¶ 12). Those of skill in the art could readily predict the intensity level at which an IR laser should be operated to cause ablation of a given ablatable layer based upon the Experiments described in Example 3. The Examiner's comments regarding the experiments described in the instant specification, therefore, fail to establish unpredictability in the art, and, moreover, the Examiner has not provided any credible evidence that the art is, in fact, unpredictable.

Although the Office Action alleges that "the only support for a layer that could

be ablated by infrared laser is that in Example 3 specific to a polyamide” (Office Action mailed July 30, 2002, page 5), those of skill in the art, upon review of the specification, recognize that numerous binders are described that can be used in the claimed IR-ablatable ablation layers (Murphy Decl ¶ 13). The specification states that *examples of suitable binders* include polyacetal, polyacrylic, polyamide, polyimide, polybutylene, polycarbonate, polyester, polyethylene, cellulosic polymer, polyphenylene ether, and polyethylene oxide binders (Murphy Decl ¶ 13). Upon review of this description, and the remainder of the specification, those of skill in the art recognize that the listed binders can be used interchangeably in the described ablation layers (Murphy Decl ¶ 13). Accordingly, the specification describes ablation layers ablatable by infrared laser radiation that can contain any of numerous binders, only one of which is polyamide.

Although the Office Action states that “Applicants have not established that the original disclosure would lead a worker of ordinary skill in the art to ‘envision’ *only* IR ablatable layers to use all the binders set forth in the original specification,” (Office Action dated July 30, 2002, page 7)(emphasis added), Applicants have not asserted that the specification describes ablation layers that are *only* ablatable by infrared radiation. Rather, Applicants have asserted that those of skill in the art understand the specification to describe photosensitive elements that contain a layer that is ablatable by laser radiation, without any requirement that a particular wavelength of laser radiation be used (Murphy Decl ¶ 11). Applicants have further asserted that the specification teaches that the use of IR lasers is

preferred. (Murphy Decl ¶ 12)

The evidence of record also demonstrates that those skilled in the art, upon review of the specification, would recognize that Applicants were in possession of an ablation layer that imparts opacity to non-infrared actinic radiation. As Mr. Murphy states in his declaration, those of skill in the art would recognize that the specification describes ablatable layers that provide opacity to the wavelength of light that is used to cure an accompanying photopolymerizable layer (Murphy Decl. ¶ 14). The specification, for example, states that "UV flood lamps normally provide the light for curing" (page 9, lines 33-34), and indicates that the presence of a UV absorber in the ablatable layer imparts UV opacity to the layer (Murphy Decl. ¶ 14). The specification further states that the spectral range of the flood-exposure lamps used "in *most applications*" is 300-400 nm, that the UV absorber "*typically* should be active in this range," and that an alternative way of stating this is to say that the UV absorber must have a high extinction coefficient "in the *spectral output range of the developer lamps*" (Murphy Decl. ¶ 14; page 10, lines 5 to 11, emphasis added).

As described in the specification, a "UV absorber," in turn, is a material that absorbs the radiation used during the curing process, imparting opacity to such radiation to the ablation layer (Murphy Decl. ¶ 14). Those skilled in the art would understand, therefore, that a material would be considered to be a "UV absorber" so long as the material absorbs UV light used to cure the photopolymerizable layer and imparts opacity to such light, whether or not it also happens to absorb IR radiation (Murphy Decl. ¶ 14). Those of skill in the art

further understand that a material used as the UV absorber in the ablatable layer could be active in the IR range, and could absorb both UV and IR radiation (Murphy Decl. ¶ 14).

Because the evidence of record demonstrates that Applicants' specification contains adequate written description of the claimed subject matter (and, in particular, photosensitive elements comprising ablation layers that are ablatable by infrared radiation and opaque to non-infrared actinic radiation) Applicants request that the rejection under § 112, first paragraph, be withdrawn.

## **II. The Fan Patent Does Not Anticipate the Claims**

Claims 10 to 14, 17 and 18 have been rejected under 35 U.S.C. § 102(e) or § 102(a) as allegedly anticipated by U.S. Patent No. 6,238,837 (hereinafter "the Fan patent") and its EPO equivalent (EPO Patent No. EP 0741330), as evidenced by U.S. Patent No. 4,045,231, U.S. Patent No. 4,430,417, and U.S. Patent No. 4,323,636. Applicants respectfully traverse the rejection because the claims are entitled to a filing date that is early enough that the Fan patent is not available as prior art.

The Office Action mistakenly suggests that support for claims 10 to 14, 17 and 18 is not found in priority application number 08/082,689, filed June 25, 1993, and that the Fan patent is therefore somehow available as prior art against the claims. As discussed in Section I of this Response, however, the present specification provides ample support for claims 10 to 14, 17 and 18. Since the supporting disclosure appears nearly verbatim in

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**PATENT  
RESPONSE UNDER 37 C.R.F. § 1.116  
EXPEDITED PROCEDURE  
GROUP ART UNIT 1752**

application number 08/082,689, the claims are entitled to the benefit of the June 25, 1993, filing date of that patent application. Because this date is more than twenty-two months before the earliest filing date to which the Fan patent purports to be entitled, the Fan patent is not prior art against the present claims. Accordingly, the rejection for alleged anticipation is improper, and should be withdrawn.

**III. Information Disclosure Statements**

Applicants would like to thank the Examiner for returning initialed copies of the previously submitted 1449 Forms. The reference listed as GH on the 1449 Form submitted in connection with the Information Disclosure Statement filed August 3, 2001 was not initialed, however. Accordingly, the reference is being resubmitted herewith, along with a clean copy of the page of the 1449 Form originally filed August 3, 2001 that lists the reference. Applicants request the Examiner to return the initialed 1449 Form indicating that the reference has been considered.

**DOCKET NO.: POLY-1194**

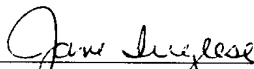
**PATENT  
RESPONSE UNDER 37 C.R.F. § 1.116  
EXPEDITED PROCEDURE  
GROUP ART UNIT 1752**

**Conclusion**

Applicants submit that the claims are in condition for allowance. An early Office Action to that effect is earnestly solicited.

Respectfully submitted,

Date: **October 24, 2002**

  
\_\_\_\_\_  
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